

# CHAPTER 1

## INTRODUCTION

### 1-1. GENERAL.

#### WARNING

Unauthorized modifications to and deviations from prescribed life support and survival equipment by individual aircrewmembers could create unknown safety hazards. The OPNAVINST 3710.7 Series specifies minimum requirements for such equipment and is supplemented by the individual model NATOPS.

1-2. The OPNAVINST 4790.2 Series identifies NAV-AIRSYSCOM as the only authority for modification to life support equipment and survival equipment, which is usually accomplished by the Fleet Support Team (FST) (formerly Cognizant Field Activity (CFA)) via Aircrew System Changes or a change to the equipment procurement package. This manual also permits operating activity with approval of the controlling custodian, to conditionally modify ONE unit of equipment in service to correct or overcome unsatisfactory conditions in that equipment item. Any other type of deviation, peculiar configuration, or modification to life support and survival equipment is not allowed, and Aircrew Survival Equipmentmen have no authority or responsibility to perform them.

1-3. If an omission or conflict should occur between FST documents and NATOPS requirements, if there is a need for clarification of equipment configuration, or if equipment deficiencies are discovered, the applicable FST should be notified. The FST for most of the life support and survival equipment is the Naval Air Warfare Center Aircraft Division (NAWCAD) Code 4.6.3.2, NAS Patuxent River, MD, 20670-1906. For parachutes and related hardware, including torso harnesses, the FST is the Naval Air Warfare Center Weapons Division, Code 463000D, China Lake, CA, 93555.

1-4. Naval Air Warfare Center, Indianapolis, Indiana has cognizance over all survival radios and emergency beacons.

1-5. This Aviation Crew Systems manual is released under the authority of the Naval Air Systems Command in compliance with the request of the Chief of Naval Operations. The instructions continued herein are mandatory. This manual consists of separately bound volumes as listed below:

TITLE	PUBLICATION NUMBER
Inflatable Survival Equipment (Liferafts)	NAVAIR 13-1-6.1-1
Inflatable Survival Equipment (Life Preservers)	NAVAIR 13-1-6.1-2
Parachutes	NAVAIR 13-1-6.2
Seat Survival Kits (Oxygen Hoses and Non-SKU Seat Kits)	NAVAIR 13-1-6.3-1
Seat Survival Kits (SKU Series Seat Kits)	NAVAIR 13-1-6.3-2
Oxygen Equipment (Aircraft Equipment, Masks, and Other Systems)	NAVAIR 13-1-6.4-1
Oxygen Equipment (Regulators)	NAVAIR 13-1-6.4-2
Oxygen Equipment (Concentrators)	NAVAIR 13-1-6.4-3
Oxygen Equipment (Converters)	NAVAIR 13-1-6.4-4
Rescue and Survival Equipment	NAVAIR 13-1-6.5
Aircrew Personal Protective Equipment (Aircrew/Passenger Equipment)	NAVAIR 13-1-6.7-1
Aircrew Personal Protective Equipment (Clothing)	NAVAIR 13-1-6.7-2
Aircrew Personal Protective Equipment (Helmets and Masks)	NAVAIR 13-1-6.7-3
Aircrew Personal Protective Equipment (Protective Assembly, Aircrew Survival - Armor)	NAVAIR 13-1-6.7-4
Special Missions Aircrew Equipment	NAVAIR 13-1-6.10

## NAVAIR 13-1-6.4-3

1-6. The purpose of each volume is to provide technical information related to the configuration, application, function, operation, storage, and maintenance of a particular category of aircrew safety and survival equipment. The information contained in each volume is intended for Organizational, Intermediate, and Depot Levels of maintenance as established within the Naval Aviation Maintenance Program, OPNAVINST 4790.2 Series.

### 1-7. DESCRIPTION OF NAVAIR 13-1-6.4-3.

**1-8. CONTENTS.** This volume contains information and instructions pertaining to the configuration, function, application, operation, storage, and maintenance of oxygen equipment.

**1-9. CONFLICTS AND SUPERSEDURE.** This volume shall take precedence over all other documents except for effective Aircrew System Bulletins and Changes and Interim Aircrew System Bulletins and Changes. These documents are effective until officially rescinded, canceled, or superseded.

1-10. The Modification Section of each chapter lists all effective changes which affect oxygen equipment and have been issued on or before the date of latest change or revision to this volume. When applicable, the subject matter of these documents has been incorporated within the text of the appropriate chapters of this volume.

1-11. Effective changes and bulletins which affect oxygen equipment and are issued between changes or revisions to this volume should be recorded in the modification section of the manual for the affected equipment by annotating the outer margin of the page with a vertical line and the number of the change or bulletin. A copy of the change or bulletin should be filed in a separate binder in the ALSS work center. When this volume is updated these documents will be listed in the modification sections of the applicable chapters and the text of the chapters will be updated as required.

**1-12. UPDATING.** This volume will be updated periodically by the issuance of a Revision which is a 100% replacement of pages. Between revisions, changes and rapid action changes will be released, which are partial replacement of pages. All added and changed pages shall be incorporated in the volume according to page number. Superseded and deleted pages shall be discarded in accordance with

local security procedures for data containing distribution statements. A list of effective pages is provided with each change. A summary of the major changed areas for a particular change is located directly beneath the list of effective pages.

### 1-13. COMMENTS AND RECOMMENDATIONS.

Comments and recommendations shall be submitted in accordance with OPNAVINST 4790.2 Series.

**1-14. ENGINEERING DRAWINGS.** Government engineering drawings are available to the fleet by submitting a letter of request to Commanding Officer, Naval Air Technical Data and Engineering Service Command, Naval Air Station North Island, P.O. Box 357031, Building 90 Distribution, San Diego, CA 92135-7031. Each request should include the equipment nomenclature, part number, and CAGE code. The Drawings will be provided in the form of aperture cards (Automatic Data Processing Punch Cards). Technical data may also be obtained online at the NATEC website located at <http://www.natec.navy.mil>. Authorized users must first establish an account prior to obtaining data. Access/account information can be obtained at the NATEC website.

### 1-15. TECHNICAL DIRECTIVES AND FORMS.

NATEC is the central management activity for aeronautical technical publications, engineering drawings and associated technical services. Upon release, NATEC will forward to all designated activities, copies of Technical Directives and Forms. Additional copies are available utilizing the procedures shown in paragraph 1-14 as well as from the PMA-202 website at <https://pma202.navair.navy.mil>.

### 1-16. SUPPLEMENTARY PUBLICATIONS.

1-17. In addition to Aircrew Systems Bulletins and Changes and Interim Aircrew Systems Bulletins and Changes still in effect, the following publications supplement this volume.

1. Naval Aviation Maintenance Program, OPNAVINST 4790.2 Series.

2. NAVAIR 00-35QH-2, Allowance List, Aviation Life Support System and Airborne Operation Equipment for Aircraft Squadrons Navy and Marine Corps.

3. Naval Logistical Library (NAVSUP 600), which lists directives and manuals available from the supply system.

4. The applicable Aircraft Maintenance Instruction Manuals, Planned Maintenance System Publications, NATOPS Flight Manuals, and Pilot's Handbooks.

■ 5. OPNAVINST 4410.2A.

6. OPNAVINST 3710.7 Series provides general instructions on required minimums for aircrew personal protective equipment.

7. NAVFAC/DM-24. Naval Facilities Engineering Command design manual.

8. P2300. List of Repairable Assemblies and Applicability of Navy Aviation Materials.

9. P2310. List of Supporting Repair Parts of Navy Aviation Materials.

■ 10. NAVSUPINST 4423.29 Series. Naval Material Command (NMC) Uniform Source, Maintenance and Recoverability (SM&R) Codes.

11. NAVAIR 13-1-6-8 Aviation Crew Systems Work Unit Code Manual.

12. NAVAIR 01-1A-509 Cleaning and Corrosion Control Organizational and Intermediate Maintenance.

13. NAVAIR 06-30-501 Technical Manual of Oxygen/Nitrogen Cryogenic Systems.

14. NAVSUPINST 4440.128 Compressed Gases and Gas Cylinders, Storage, Handling and Testing.

15. Ground Support Equipment. All Ground Support Equipment comments and recommendations shall be directed to the cognizant activities, Naval Air Engineering Center, Ground Support Equipment Dept., Lakehurst, NJ 08733.

16. NAVSUP P-719 is a Guide for the Assignment and Use of Source, Maintenance and Recoverability (SM&R) Codes. ■

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